Claims As Currently Pending
U.S Serial No.: To be Assigned
(Continuation Application of 09/291,215)
February 6, 2001

1. A method for typing a sample of a prion or spongiform encephalopathy disease the method comprising comparing and identifying similar physicochemical properties of the sample with a standard sample of known type.

2. A method as claimed in claim 1 wherein the standard sample of known type is bovine spongiform encephalopathy or Creutzfelt-Jakob disease.

3. A method as claimed in claim 1 wherein the comparison of physicochemical properties comprises a comparison of protease resistance and/or glycoform ratios.

4. (Once Amended) A method as claimed in claim 3 wherein the protease resistance is proteinase K resistance.

5. (Once Amended) A method as claimed in claim 3 wherein the spongiform encephalopathy is mammalian or chicken derived, in particular, bovine, feline, cervine, ovine, human (or other primate-suitably macaque) or murine derived.

6. (Once Amended) A method as claimed in claim 3 wherein the method comprises the steps of subjecting the sample to digestion by a protease, electrophoresing the result of the digestion step and comparing the resulting pattern of the electrophoresis with a standard electrophoresis pattern of a known sample.

7. (Once Amended) A method as claimed in claim 3 wherein the typing of the sample comprises a method of diagnosing a disease.

8. (Once Amended) A method as claimed in claim 3 wherein the sample to be typed if mammalian or chicken derived, in particular derived from a human, (or other primate-suitably macaque) bovine, feline, ovine, cervine, or murine animal.

9. (Once Amended) A method as claimed in claim 3 wherein the sample to be typed is derived from brain tissue, other central nervous system tissue, a tissue of the lymphoreticular system (including the spleen, tonsil or lymph node), cerebrospinal fluid and/or the blood.

10. (Once Amended) A method as claimed in claim 6 wherein the electrophoresis pattern of the known sample has a pattern substantially similar to that of type 4 as shown in figure 4.

13. A method of identifying infection in an animal and/or tissue of bovine spongiform encephalopathy the method comprising isolating a prion protein from the animal and/or tissue and identifying that said prion protein can be characterized by having three distinct bands on an electrophoresis gel following proteinase K digestion, the bands comprising i) a band of highest molecular weight in the greatest proportion, ii) a band of lowest molecular weight in the lowest proportion, and (iii) a band with a molecular weight between i and ii and a proportion between i and ii or characterized by having substantially similar glycoform proportions as bovine spongiform encephalopathy.

14. A method as claimed in claim 13 wherein the animal or tissue is non-bovine.

15. A method as claimed in claim 13 wherein the animal, and/or tissue, from which the prion is sampled is mammalian or chicken derived, in particular, human, (or other primate-suitably macaque) bovine, feline, cervine, ovine, or murine derived.

16. A method as claimed in claim 13 wherein the prion is derived from brain tissue, other central nervous system tissue, a tissue of the lymphoreticular system (including the spleen, tonsil or lymph node), cerebrospinal fluid and/or the blood.

26. A method for identifying infection in an animal and/or tissue, as claimed in claim 13, substantially as hereinbefore described with reference to the examples.

27. A method for assessing and/or predicting the susceptibility of an animal, in particular a human, to bovine spongiform encephalopathy or a derivative thereof, substantially as hereinbefore described.